

ABSTRACT

A substrate **11** consists of a semiconductor layer **12** as an element formation region and an STI **13** as an isolation region. A gate dielectric **15** is provided on the
5 semiconductor layer **12**, and a gate electrode **14** is provided to extend from the top of the gate dielectric **15** to the top of the STI **13**. A sidewall **30** for covering the sides of the gate electrode **14** is provided to extend across the top of the semiconductor layer **12** to the tops of regions of the STI **13** adjacent to the outer edges of the semiconductor layer **12**. The sidewall **30** is employed as an ion implantation mask for forming high-concentration
10 impurity diffusion layers **16** each serving as a source/drain region.